A New Species of *Parathesis* (Myrsinaceae) from Ecuador

John J. Pipoly III
Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.

ABSTRACT. *Parathesis palaciosii* is described and illustrated, and its phylogenetic relationships are discussed.

The genus *Parathesis* J. D. Hooker contains 130 species distributed southward from southern Mexico to Panama, the Caribbean, and through the Andes from Venezuela to Peru. The genus is defined by unique glandular papillae, which are found on the calyx and corolla lobes, and bright yellow anthers. During determination of specimens from the PROMOBOT (Promoción Botánica) project in Ecuador, a new species was encountered, which is here described.

Parathesis palaciosii Pipoly, sp. nov. TYPE: Ecuador. Napo: Cantón Tena, Estación Biológica Jatun Sacha, Río Napo, 8 km E of Misahuallí, 1°04′S, 77°36′W, 400 m, 12–14 Dec. 1989 (fl), *Palacios 4761* (holotype, QCNE; isotypes, F, MO, NY, TEX, US). Figure 1.

Propter laminas chartaceas ad apices acuminatas ad bases acutas decurrentes, secus margines crenulatas, petiolo marginato, sepala ovato-triangulares, petala linearilanceolata atro-lineato-punctataque, anthera primo erecta tarde versatilis *P. pyramidalis* valde arcte affinis, sed ab ea laminis ellipticis vel oblongis (non oblanceolatis vel obovatis), nerviis secundariis conspicuis (non inconspicuis) desuper immersis (nec planis), sepalis 1.5–1.8 (non 1–1.2) mm longis, pellucido-(nec atro-)punctatis, squamis lepidotis translucentibus indutis (nec elepidotis), petalis 7–9 (non 5–7) mm longis, staminibus 7–8.1 (non 3–4) mm longis, filamentis 6.4–6.7 (non 2.3–2.5) mm longis, antheris apiculatis (nec obtusis) statim distinguitur.

Tree to 20 m tall, 35 cm DBH; trunk prominently fenestrate, sap copious, clear, odorless; branchlets subterete, 3.5–5 mm diam., finely appressed ferrugineous stellate-tomentose. Leaf blades chartaceous, elliptic to oblong, (8–)14–17(–19) cm long, (3.7–)5–7(–7.5) cm wide, apex abruptly acuminate to caudate, base acute, decurrent on the petiole, midrib raised above and below, secondary veins (19–)20–35 pairs, immersed above, prominently raised below, glabrous above except along midrib, sparsely and minutely ferrugineous stellate-tomentose below, bizonal, the trichomes more densely packed along the midrib area and the veins, densely and prominently punctate, the margin slightly revolute, crenulate; petioles marginate, (1.8–)2.5–3 cm long, glabrous above, densely and minutely ferrugineous stellate-tomentose below. Inflorescence bisexual, terminal, pyramidal, bipinnately paniculate, (6–)12–16 cm long, (6–)10–12 cm wide at base, the principal branches subtended by small leaves, the leaf blades chartaceous, elliptic, 4.5–7.5 cm long, 1.7–3.5 cm wide, apex acuminate, base acute, decurrent on the petiole, otherwise as in vegetative leaves; petioles marginate, 0.7–1 cm long, glabrous above, sparsely and minutely ferrugineous stellate-tomentose below; peduncle obsolete to 1.5 cm long, rachis, branches and pedicels densely appressed ferrugineous stellate-tomentose; floral bracts chartaceous, linear-lanceolate, 2.5–3 mm long, ca. 0.1–0.2 mm wide, apex subulate, early caducous; pedicels cylindrical, erect, 4.8–7.2 mm long, not accrescent in fruit. Flowers corymbose, 5-merous, 7–9.2 mm long, calyx brown, chartaceous, inconspicuously pellucid punctate, densely and minutely tomentose, the sepals ovate-triangular, 1.5–1.8 mm long, 0.9–1.3 mm wide, apex acute, sparsely translucent-lepidote, the margins entire; petals pink, chartaceous, linear-lanceolate, 7–9 mm long, 1.5–1.9 mm wide, apex subulate, densely and prominently black punctate-lineate (the punctations linear), densely and minutely stellate-tomentose without, densely translucent papillose-tomentose along the margin within and throughout the distal ⅓; stamens 7–8.1 mm long, erect, the filaments flat, 6.4–6.7 mm long, prominently black punctate-lineate, the anthers erect, then tardily versatile, lanceolate, 2.2–2.5 mm long, 1–1.2 mm wide, apex apiculate, glabrous, base sagittate, dehiscent by longitudinal slits; ovary globose, densely tomentose with erect hairs, the style filiform, accrescent to 11.7 mm long, the placenta depressed-globose with 4–5 uniseriate immersed ovules. Fruit depressed-globose, 6–8 mm long, 10–12 mm diam. at maturity, black, the exocarp thick, juicy, sweet.

Distribution. Parathesis palaciosii is endemic to the Ecuadorean Amazon in the area of the Jatun Sacha Biological Reserve, 400–450 m elevation.

Ecology. This species occurs in tall very humid forest on rolling hills of lateritic soils. The species is frequently encountered and is a conspicuous element of the subcanopy, according to the collector.

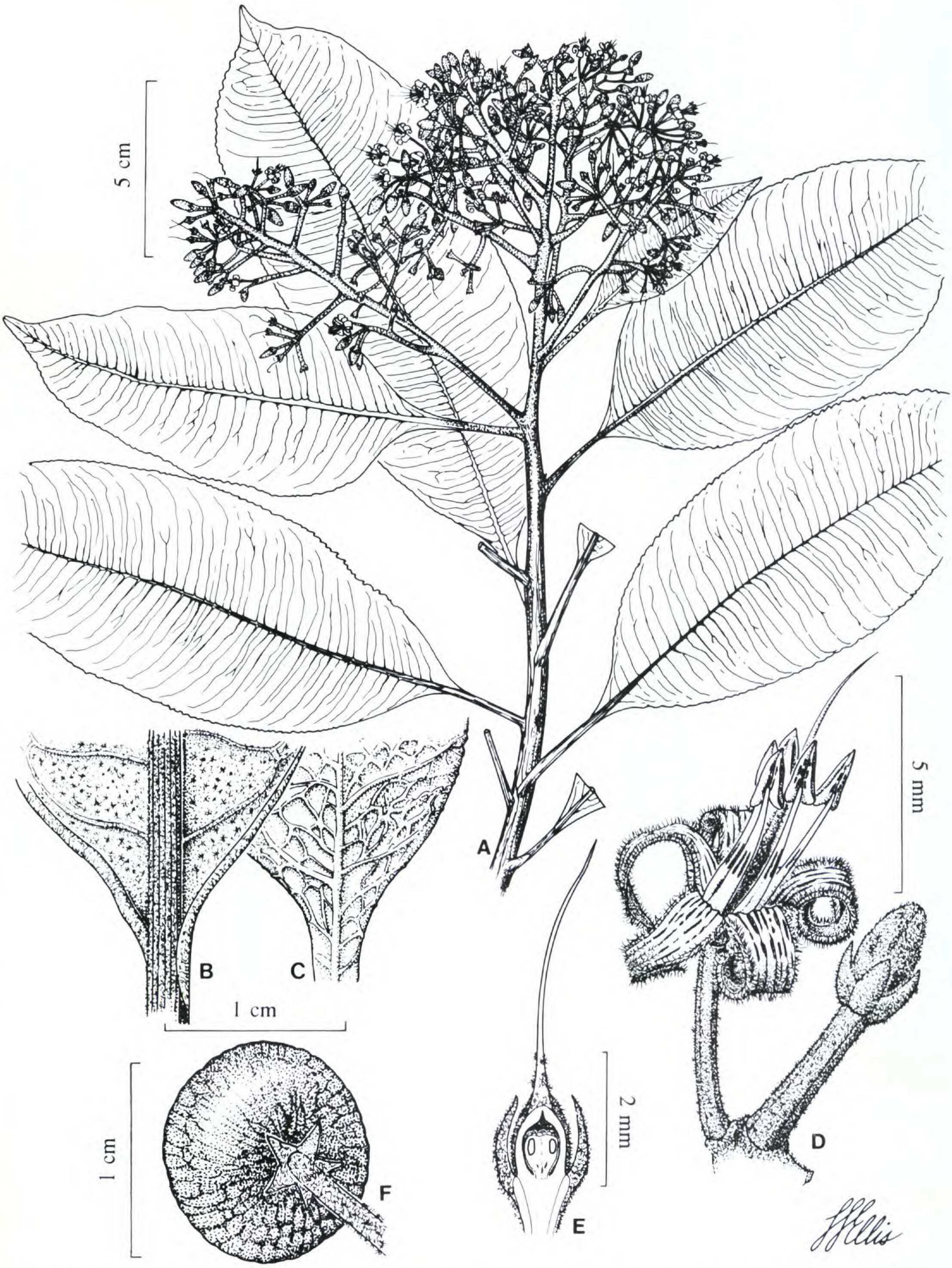

Figure 1. *Parathesis palaciosii* Pipoly. —A. Habit, showing crenulate leaves and reduced leaves subtending inflorescence branch. —B. Abaxial leaf surface, showing slightly revolute margin, tomentum, and marginate petiole. —C. Adaxial leaf surface. —D. Flowers in bud and at anthesis, showing the glandular-papillose, punctate-lineate petals, punctate-lineate filaments, and apiculate anthers with dorsal punctations. —E. Pistil in longitudinal section, showing the depressed-globose placenta with immersed, uniseriate ovules. —F. Fruit, showing acute calyx lobes. A–E drawn from isotype, F drawn from *Palacios 4262*.

Etymology. The species is named for Walter Palacios, specialist in Meliaceae, forestry engineer and parataxonomist for the Missouri Botanical Garden's PROMOBOT program in Ecuador.

Parathesis palaciosii is most closely related to *P. pyramidalis* Lundell, of the Sierra de Santa Marta, Colombia, because of its acuminate, chartaceous, crenulate leaves, ovate-triangular sepals, linear-lanceolate, black punctate-lineate petals, and anthers that are at first erect, then versatile in post anthesis. However, the deeply impressed secondary veins, longer, inconspicuously punctate and translucent lepidote sepals, longer petals and stamens, and apiculate anthers easily distinguish this taxon. The collector reports that the trunks are fenestrate, which is the first report of that trunk morphology for the genus.

Paratypes. ECUADOR. **Napo:** Cantón Tena, Estación Biológica Jatun Sacha, Río Napo, 8 km E of Misahuallí, 1°04′S, 77°36′W, 400 m, 12–14 Dec. 1989 (fr), *Palacios 4262* (AAU, F, GB, MO, NY, QCNE, US), 6 May 1990 (fl), *Palacios et al. 4940* (AAU, F, GB, MO, NY, QCNE, US), 28 Dec. 1987 (ster.), *Gentry et al. 60029* (MO, QCNE).

Acknowledgments. The Promoción Botánica Project of the Missouri Botanical Garden in Ecuador is possible thanks to the generosity of the Liz Claiborne Foundation. My studies in Andean biodiversity are supported by the Andrew W. Mellon Foundation and the John D. and Catherine T. MacArthur Foundation. I thank Linda Ellis for yet another fine illustration.